



INSTRUCTION MANUAL

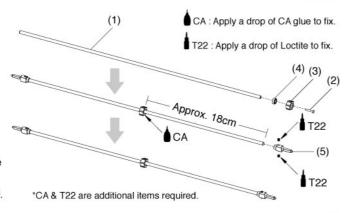
Introduction

Thank you for purchasing the Thunder Tiger Torque Tube Conversion KIT for the mini Titan E325! An all-in-one Torque Tube and Carbon Shaft KIT for unbelievable crisp rudder response and 100% power transfer. Be all you can be, and throw any mad 3D maneuvers at the mini Titan E325.

- 1. Metal drive pinion.
- 2. Tail-driven carbon shaft.
- 3. Autorotation system with straight bevel gear.
- 4. Entire tail assembly unplugs for easy transportation & storage.
- 5. Heavy-duty tail ball bearings.(11 bearings)

Step	1 Tail Drive	Tail Drive Shaft Pack		
No	Item No.	Description	Qty	
1	BK1577	CARBON FIBER ROD d2*D4*359L	1	
2	BK1584	T PIN d2*12	2	
3	BK1578	SHOCK-AXIS RUBBER WASHER d8*D11*6	1	
4	HMV840ZZY	BEARING (d4*D8*W3)	1	
5	BK1569	TORQUE TUBE JOINT	2	
6	HME3-3B	SET SCREW M3*3	4	

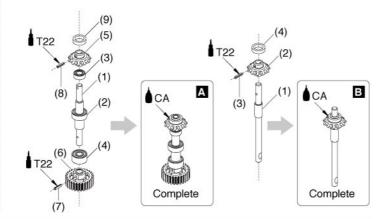
- 1. Slip the SHOCK-AXIS RUBBER WASHER (#3) & BEARING (#4) onto the CARBON FIBER ROD, then insert the T PINs to both tips of the rod.
- 2. Glue the BEARING (#4) on the rod at approximately 18cm from either end.



Step2 Tail Drive Gear Set/Tail Rotor Shaft Set

Step	No	Item No.	Description	Qty
	1	BK1568	TAIL DRIVE SHAFT, E325	1
	2	HMV840ZZY	BEARING(d4*D8*W3)	1
	3	HMV630ZZY	BEARING (d3*D6*W2.5)	1
	4	HMV830ZZY	BEARING (d3*D8*W4)	1
Α	5	BK1566	BEVEL GEAR 11T, E325	1
	6	BK1007	TAIL DRIVE GEAR 28T, E325	1
	7	HMU1-5B	SPRING SALES M1*5	1
	8	HMY1-5	PIN d1*5	1
	9	BK1573	FLANGE RINGS, E325	1
	1	BK1576	TAIL ROTOR SHAFT , E325	1
В	2	BK1566	BEVEL GEAR 11T, E325	1
	3	HMY1-5	PIN d1*5	1
	4	BK1573	FLANGE RINGS, E325	1

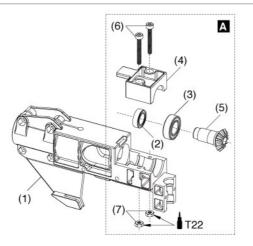
These two sets are factory pre-assembled by Thunder Tiger. Re-assemble according to the drawing as follows if necessary.



Step3 Tail Drive Unit

steps	i a	Drive Unit	Pac	k No. C
Step	No.	Item No.	Description	Qty
	1	BK1570	TAIL BOOM BRACKET, E325	1
	2	HMV1060ZZY	BEARING d6*D10*W3	1
	3	HMV1370ZZY	BEARING d7*D13*W4	1
^	4	BK1572	BEARING BRACKET	1
Α	5	BK1567	BEVEL GEAR 11T, E325	1
	6	HMC2-16B	SOCKET SCREW M2*16	2
	7	HML2	NUT M2	2
	8	HNN2-10B	TAPPING SCREW M2×10L	2

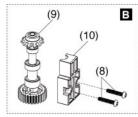
- 1. Slip the BEARINGs (#2, #3) onto BEVEL GEAR then fit to TAIL BOOM BRACKET.
- 2. Secure but not over tighten the BEARING BRACKET to the Tail Boom Bracket. Ensure the BEVEL GEAR can be rotated smoothly.

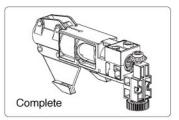


Pack No. C

Step	No.	Item No.	Description	Qty
В	9	BV1568	TAIL DRIVE GEAR SET, E325	1
	10	BK1571	FRONT BEARING BRACKET	1

- 1. Fit the TAIL DRIVE GEAR SET to TAIL BOOM BRACKET.
- 2. Secure but not over tighten the FRONT BEARING BRACKET to the Tail Boom Bracket. Ensure the TAIL DRIVE GEAR SET can be rotated smoothly.





Step4 Tail Transmission Unit

Pack No. C

No.	Item No.	Description	Qty
1	BK1574	TAIL UNIT CASE SET , E325	1
2	HMV1060ZZY	BEARING d6*D10*W3	1
3	HMV1370ZZY	BEARING d7*D13*W4	1
4	BK1567	BEVEL GEAR 11T, E325	1
5	BV1576	TAIL ROTOR SHAFT , E325	1
6	HMV830ZZY	BEARING d3*D8*W4	2
7	BK1575	SIDE COVER , E325	1
8	HMC2-10B	SOCKET SCREW M2*10	1
9	HMJ2-10N	TAPPING SCREW M2×10L	2
10	HML2	NUT M2	1



- 2. Install the two BEARINGs (#6) into TAIL ROTOR SHAFT.
- 3. Fit the Drive Gear Set into the TAIL UNIT CASE SET then secure the SIDE COVER as shown.

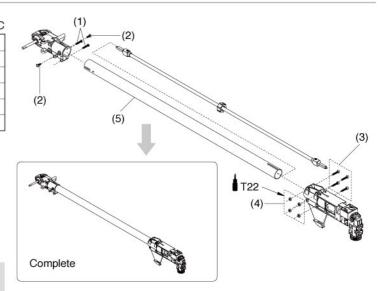
Step5 Tail Unit

Pack No. C

No	Item No.	Description	Qty
1	HNN2-10B	TAPPING SCREW M2×10L	2
2	HNN2-6B	TAPPING SCREW M2×6L	2
3	HMC2-10B	SOCKET SCREW M2*10	4
4	HML2	NUT M2	4
5	BK1004-1	TAIL BOOM 356* φ 14	1

- 1. Slip the Tail Drive Shaft gently into the TAIL BOOM. (CAUTION: Over-streessing may damage the Tail Drive Shaft.)
- 2. Connect the TORQUE TUBE JOINT into the Bevel Gears of the Tail Drive Unit & the Tail Transmission Unit. Ensure they are assembled properly and match the holes on to the tail boom.
- 3. Refer to your E325 manual to assemble the Tail Rotor Set and slide the Tail Unit into the Main Frame of your E325.

Note: We strongly recommend to recheck/readjust upon completing assembly of the conversion kit.













PV1151 TAIL BOOM BRACKET PV1152 BEVEL GEAR 11T

PV1153 TAIL DRIVE GEAR SET PV1154 TORQUE TUBE END







PV1158 TAIL UNIT CASE SET



















零件包編號 A

零件包編號 B

零件包編號 C

感謝您選購雷虎科技專為 E325 所推出的軸傳動系統升級套件,本升 級套件能讓您的 E325 爆發出近乎瘋狂的 100% 輸出動力能量!高強 度輕質化碳纖材質尾轉動主軸能讓您毫無顧慮地盡情飛行極限 3D 特 技動作!

- 1. 金屬傳動齒輪。
- 2. 碳纖尾轉動軸。
- 3. 傘齒輪傳動設計,可執行熄火降落。
- 4. 快拆式高強度尾管設計,維修便利。
- 5. 全套件配備滾珠軸承(11組)。

組裝步驟

步驟一. 尾傳動軸

		7311	- 2000 0000
編號	料號	名稱	數量
1	BK1577	碳纖棒 d2*D4*359L	1
2	BK1584	T型銷	2
3	BK1578	軸傳避震墊圈 d8*D11*6	1
4	HMV840ZZY	滾珠軸承 d4*D8*W3	1
5	BK1569	驅動軸接頭	2
6	HME3-3B	無頭内六角螺絲 M3*3	4

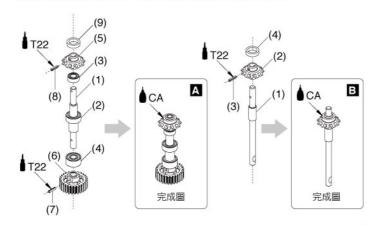
- 1. 先將軸傳避震墊圈(#3)及滾珠軸承(#4)穿套過碳纖棒,再將兩個T型銷 插入碳纖棒兩端。
- 2. 使軸傳避震墊圈與碳纖棒未端距離約18公分。

CA:使用微量快乾膠固定 ■ T22:使用微量防鬆膠固定 * 膠類需自行準備

步驟二. 尾傳動齒輪組/尾旋翼橫軸組

步驟	編號	料號	名稱	數量
	1	BK1568	尾驅動軸	1
	2	HMV840ZZY	滾珠軸承 d4*D8*W3	1
	3	HMV630ZZY	軸承 d3*D6*W2.5	1
	4	HMV830ZZY	滾珠軸承 d3*D8*W4	1
Α	5	BK1566	傘齒輪 11T-1	1
	6	BK1007	尾驅動齒 28T	1
	7	HMU1-5B	彈簧銷 M1*5	1
	8	HMY1-5	插銷 d1*5	1
	9	BK1573	輪緣套環	1
	1	BK1576	尾旋翼橫軸	1
В	2	BK1566	傘齒輪 11T-1	1
	3	HMY1-5	插銷 d1*5	1
	4	BK1573	輪緣套環	1

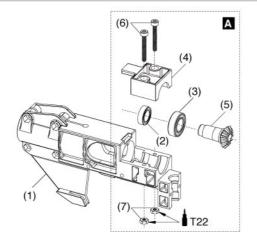
原廠已完成此部份組裝。如需重新組裝可參考下圖順序進行。



步驟三. 尾傳動組

步驟	編號	料號	名稱	數量
	1	BK1570	尾管固定座	1
	2	HMV1060ZZY	滾珠軸承 d6*D10*W3	1
	3	HMV1370ZZY	滾珠軸承 d7*D13*W4	1
Α	4	BK1572	尾管固定座上蓋	1
А	5	BK1567	傘齒輪 11T-2	1
	6	HMC2-16B	内六角螺絲 M2*16	2
	7	HML2	六角螺帽 M2	2
	8	HNN2-10B	墊圈自攻螺絲(粗) M2*10L	2

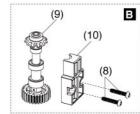
- 1. 將兩組滾珠軸承(#2及#3)套入傘齒輪後,安裝於尾管固定座
- 2. 將尾管固定座上蓋組裝至尾管固定座上,勿過度鎖緊以確保傘齒輪 組轉動順暢。

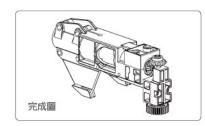


零件包編號 C

			1311 5	
步驟	編號	料號	名稱	數量
В	9	BV1568	尾驅動軸組	1
	10	BK1571	尾管固定座前蓋	1

- 1. 將尾傳動齒輪組安裝於尾管固定座。
- 2. 將尾管固定座前蓋組裝至尾管固定座上,勿過度鎖緊以確保尾驅動 輪組轉動順暢。





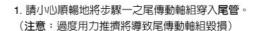
步驟四. 尾部傳動組

零件包編號 C 編號 名稱 數量 料號 尾座 BK1574 2 HMV1060ZZY 滾珠軸承 d6*D10*W3 3 HMV1370ZZY 滾珠軸承 d7*D13*W4 4 BK1567 傘齒輪 11T-2 5 BV1576 尾旋翼橫軸組 6 HMV830ZZY 滾珠軸承 d3*D8*W4 2 BK1575 尾座側蓋 1 HMC2-10B 内六角螺絲 M2*10 1 HMJ2-10N 自攻螺絲 M2*10 2 10 HML2 六角螺帽 M2

- 1. 將兩組滾珠軸承(#2及#3) 套入傘齒輪
- 2. 尾旋翼橫軸組套上兩組滾珠軸承 (#6)
- 3. 將裝妥軸承之傘齒輪及尾旋翼橫軸組安裝於尾座上,並將尾座側蓋鎖上,如右圖所示。

步驟五. 尾部組裝

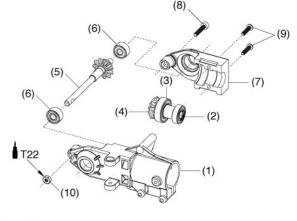
		דוכד			
編號	料號	名稱	數量		
1	HNN2-10B	墊圈自攻螺絲(粗) M2*10L	2		
2	HNN2-6B	墊圈自攻螺絲 M2*6L	2		
3	HMC2-10B	内六角螺絲 M2*10	4		
4	HML2	六角螺帽 M2	4		
5	BK1004-1	尾管 356* ø 14	1		

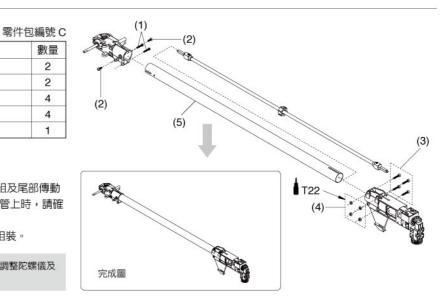


2. 將尾傳動軸組上兩端的驅動軸接頭確實插入於尾傳動組及尾部傳動 組上之傘齒輪中。 將尾傳動組及尾部傳動組組裝於尾管上時,請確 認兩者正確定位於尾管上之孔位。

3. 請參閱 E325 組裝說明書完成尾旋翼及尾管固定座之組裝。

注意:安全起見,強烈建議您在進行飛行前,務必重新確認、調整陀螺儀及 尾舵伺服機行程量













PV1151 尾管固定座

PV1152 傘齒輪 (11T)

PV1153 尾驅動軸

PV1158 尾座

PV1154 傳動軸接頭

PV1155 碳纖棒 (d2*D4*359L)











PV1157 軸傳避震墊圈





PV1161 滾珠軸承 (d6*D10*W3) PV1162 滾珠軸承 (d4*D8*W3) PV1163 滾珠軸承 (d3*D8*W4) PV1164 T型銷 (d2*12)



http://www.thundertiger.com